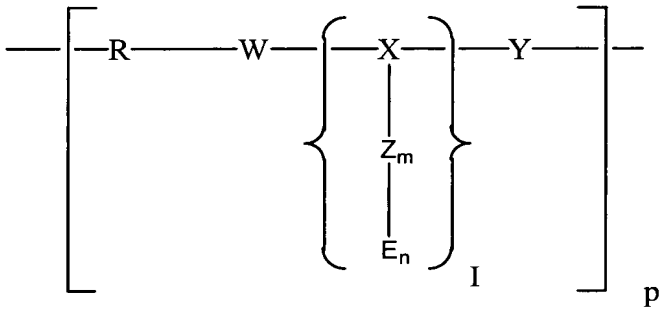
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A combination of a carrier and a complex comprising a nucleic acid molecule and a charged copolymer of the general formula I

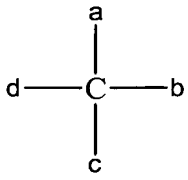


wherein R is an amphiphilic polymer or a homo- or hetero-bifunctional derivative thereof,

and wherein X

i) is an amino acid or an amino acid derivative, a peptide or a peptide derivative or a spermine or a spermidine derivative; or

ii) wherein X is



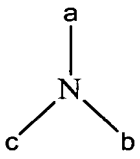
wherein

a is H or, optionally halogen- or dialkylamino-substituted, C_1-C_6 alkyl; and

wherein

b, c and d are the same or different, optionally halogen- or dialkylamino-substituted, C_1-C_6 alkylene; or

iii) wherein X is



wherein

~~a is H or, optionally halogen or dialkylamino substituted, C_1-C_6 alkyl,~~

~~and wherein~~

a, b and c are the same or different, optionally halogen- or dialkylamino-substituted, C_1-C_6 alkylene; or

iv) wherein X

is a substituted aromatic compound with three functional groupings $W_1Y_1Z_1$, wherein W, Y and Z have the meanings mentioned below;

wherein

W, Y or Z are the same or different groups CO, NH, O or S or a linker grouping capable of reacting with SH, OH, NH or NH_2;

and wherein the effector molecule E

is a cationic or anionic peptide or peptide derivative or a spermine or spermidine derivative or a glycosaminoglycane or a non-peptidic oligo/polycation or -anion; wherein

m and n are independently of each other 0, 1 or 2; wherein

p preferably is 3 to 20; and wherein

l is 1 to 5.

2. (Previously presented) The combination according to claim 1, wherein the amphiphilic polymer is a polyalkylene oxide.

3. (Previously presented) The combination according to claim 2, wherein the amphiphilic polymer is a polyalkylene glycol.

4. (Previously presented) The combination according to any one of claims 1 to 3, wherein X or E is a charged peptide or peptide derivative.

5. (Previously presented) The combination according to claim 1, wherein a ligand for a higher eukaryotic cell is coupled to the copolymer.

6. (Previously presented) The combination according to any one of claims 1 – 3 and 5, wherein the nucleic acid molecule is condensed with an organic polycation or cationic lipid molecule and the complex formed thereby has a charged copolymer of the general formula I bound to its surface via ionic interaction.

7. (Previously presented) The combination according to any one of claims 1 – 3 and 5, containing a therapeutically effective nucleic acid molecule.

8. (Previously presented) The combination according to any one of claims 1 – 3 and 5, wherein the carrier consists of a biologically non-resorbable material.

9. (Previously presented) The combination according to any one of claims 1 – 3 and 5, wherein the carrier consists of a biologically resorbable material.

10. (Original) The combination according to claim 9, wherein the biologically resorbable material is collagen.

11. (Original) The combination according to claim 10, wherein the carrier is a collagen sponge.

12. (Previously presented) The combination according to any one of claims 1 – 3 and 5, wherein the carrier is a carrier which is obtainable by cross-linkage of a copolymer as defined in claim 1.

13. (Previously presented) A method of transferring a nucleic acid molecule into a cell comprising using the combination according to any one of claims 1 – 3 and 5.

14. (Previously presented) A pharmaceutical composition comprising the combination according to any one of claims 1 – 3 and 5.

15. (Canceled).

16. (New) A kit comprising a carrier and a copolymer or a complex as defined in claim 1.

17. (New) The combination according to claim 1, wherein I is 1.